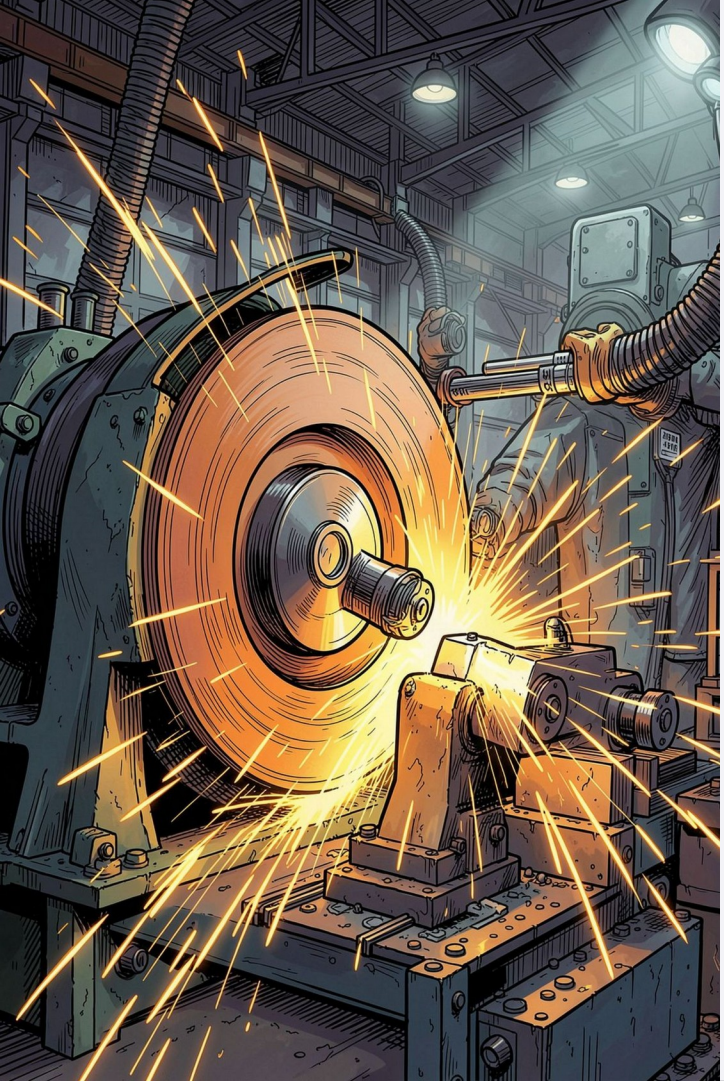
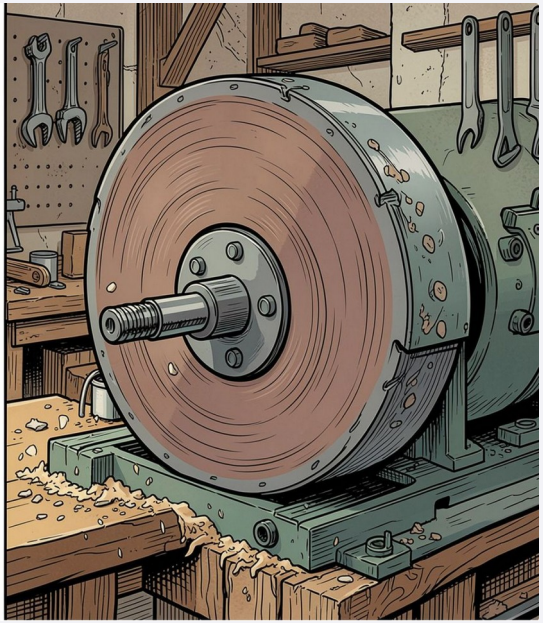


Grinding Wheels: Powering Indian Industrial Growth

From humble stone tools to high-tech super abrasives — India's grinding wheel industry has shaped precision manufacturing for over seven decades.

From Manual Craft to Industrial Precision



The Primitive Origins

Before mechanization, craftsmen relied on stone, sand, and manual chisels — slow, imprecise, and limited in scale. The Industrial Revolution demanded a quantum leap in material removal and surface finish.

The Precision Shift

Mechanical equipment and mass production necessitated bonded abrasive wheels — engineered mineral compositions capable of repeatable, high-tolerance grinding across diverse materials and industries.

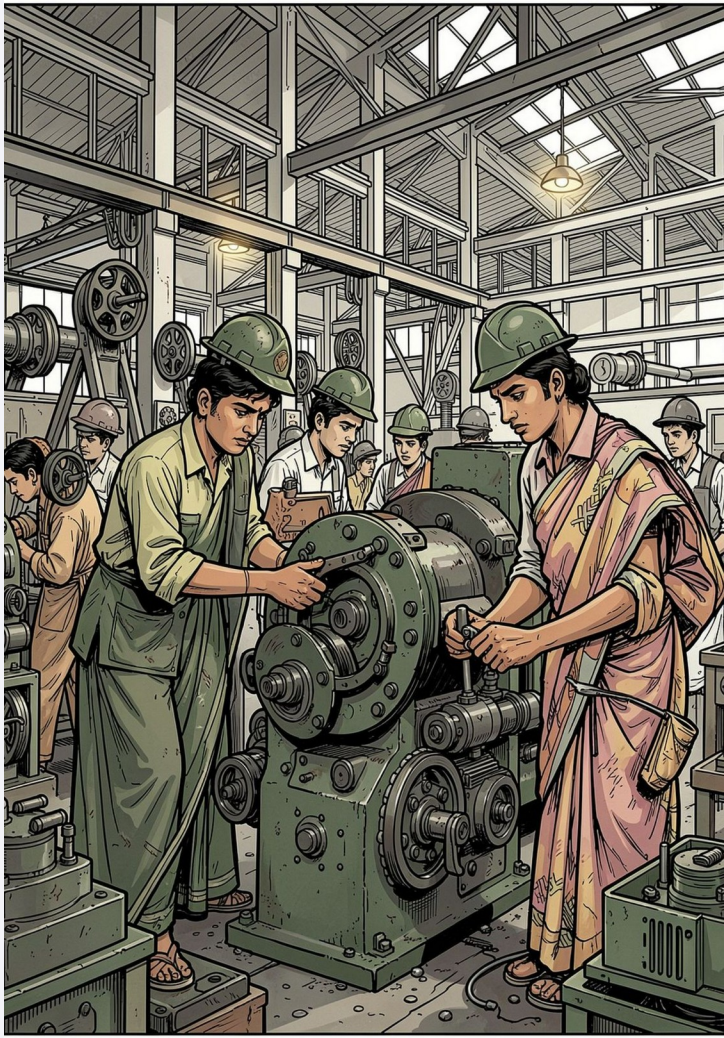
Foundations: The Mid-Century Pioneers

1950 — Grindwell Norton

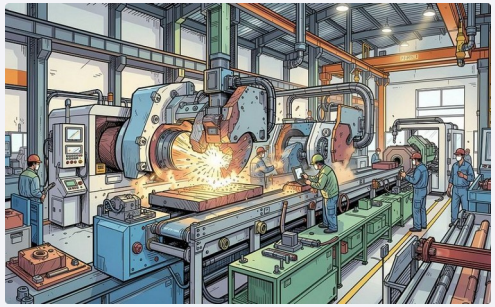
Established as India's first domestic abrasive manufacturer, Grindwell Norton set the benchmark for quality bonded grinding wheels, laying the groundwork for an entire industry.

1954 — Carborundum Universal (CUMI)

CUMI began operations, rapidly expanding India's capacity for high-performance bonded abrasives and establishing itself as a cornerstone of industrial grinding capability.

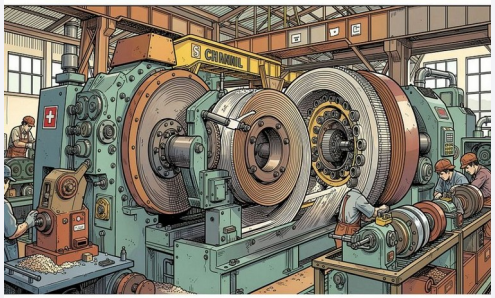


The Rise of Market Leaders



Wendt (India) Limited

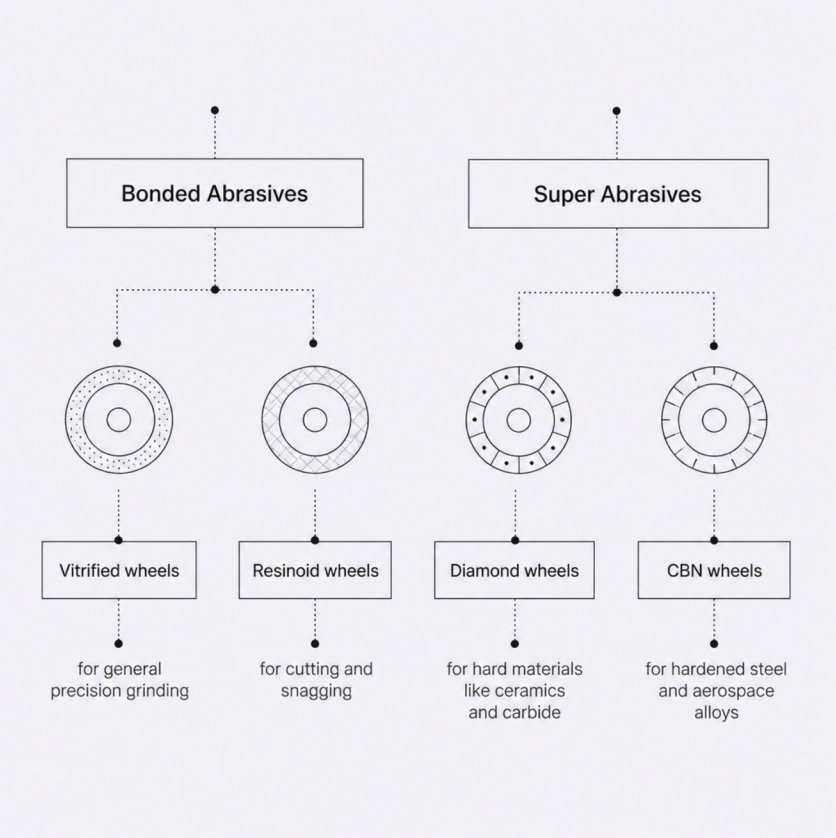
With over four decades of market leadership, Wendt India dominates the super abrasives segment, serving precision industries with diamond and CBN wheel technology.



Sak Abrasives — Est. 1997

Integrating Swiss technology at its Chennai facility, Sak Abrasives bridges international precision standards with Indian manufacturing scale for commercial and industrial applications.

Defining the Abrasives Landscape



The Bonded Advantage

Vitrified and resinoid wheels remain the workhorses of precision grinding — versatile, cost-effective, and engineered for consistent material removal across general manufacturing.

Super Abrasives for High-Tech

Diamond and CBN wheels serve demanding sectors — automotive, solar, and aerospace — where extreme hardness, tight tolerances, and thermal stability are non-negotiable.

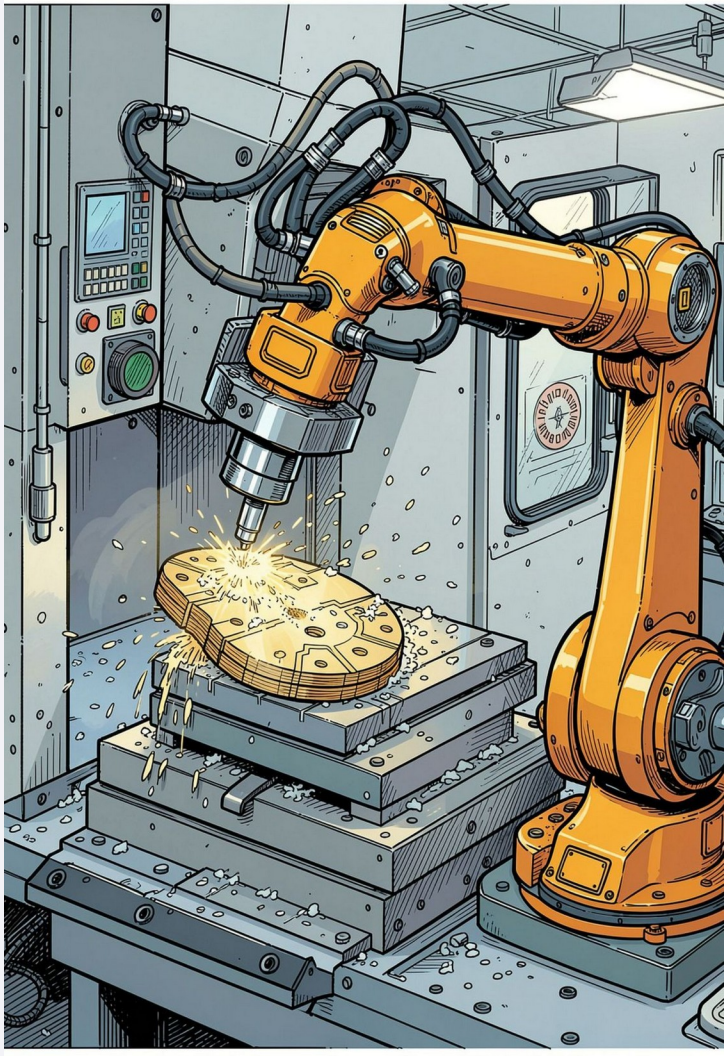
Technological Transformation

Automation & CNC Integration

Modern grinding lines feature CNC machines with built-in probing and automated gauging — reducing human error and enabling micron-level repeatability.

R&D-Driven Innovation

Investment in elastic bond development has unlocked applications in medical implants and semiconductor wafer dicing — pushing Indian abrasives into frontier industries.



The Modern Manufacturing Footprint

55+

Manufacturing Locations

Active production facilities spread across India's industrial landscape

15

Indian States

Geographic reach spanning major industrial corridors and emerging hubs

Pune Insert Grinding

Specialized facility dedicated to precision insert grinding for cutting tool and automotive applications.

Hosur High-Tech Hub

A state-of-the-art production center integrating advanced automation and super abrasive manufacturing capabilities.

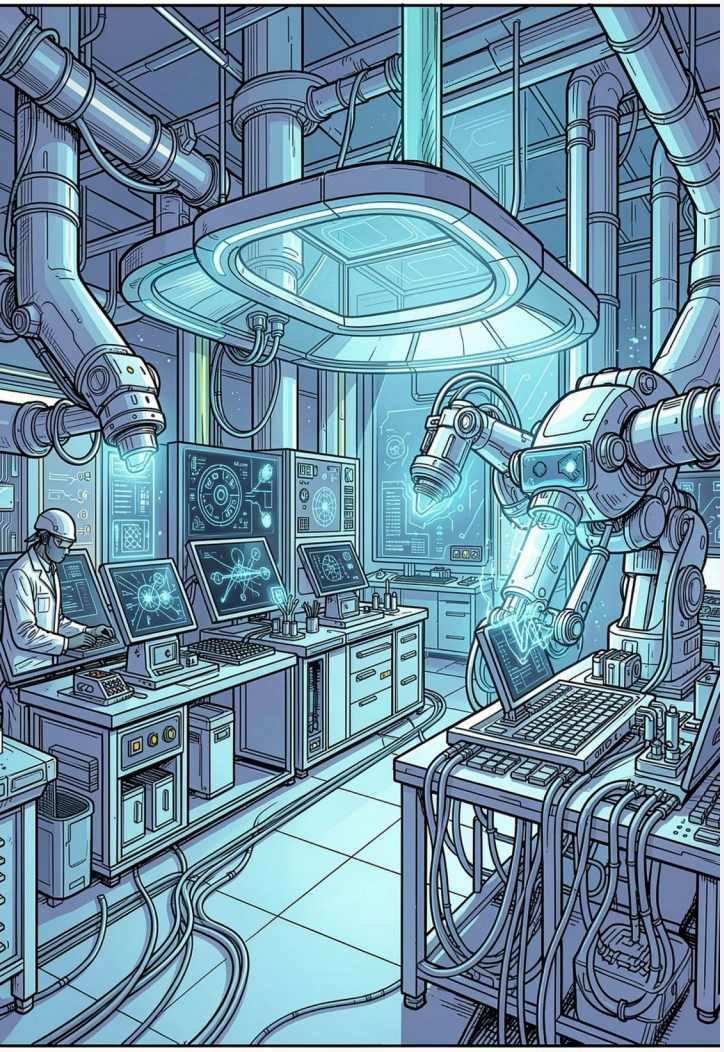
Financial Performance & Global Reach

Consistent Growth

Grindwell Norton has reported significant revenue CAGR alongside sustained operating profit growth — reflecting strong domestic demand and operational efficiency.

55+ Countries Export Network

India's grinding wheel manufacturers are no longer just domestic suppliers. Exports to over 55 countries integrate Indian precision manufacturing into the global industrial supply chain.



Strategic Evolution: 2025 and Beyond

Brand Independence

Wendt India acquired absolute ownership of its global brand — signaling confidence in its technology and a long-term vision for international market positioning.

Next-Gen Products

New introductions like the Norton Hitech Prime and precision razor blade grinding wheels reflect a relentless focus on high-margin, high-precision segments.

The Future: Precision at Scale

Invest

Upgrade manufacturing for high-tech demand

Innovate

Develop next-generation super abrasives

Compete

Champion Indian manufacturing excellence globally

India's grinding wheel industry stands at an inflection point. Continued investment in manufacturing capabilities, R&D, and global market access will define the next decade of precision industrial leadership.

Championing Indian Manufacturing Excellence — through precision, innovation, and global competitiveness, India's abrasive industry is ready to power the world's most demanding applications.